

ABSTRACT

In a vessel (2) to which waste liquid which contains ink pigment, water and cleaning liquid used in a printer is supplied, a metal electrode plate (30a, 30b) which allows the waste liquid to flow therethrough is disposed to partition the inside of the vessel (2) into a first chamber (a) and a second chamber (b). A voltage is applied to the metal electrode plate (30a, 30b) while a grounding electrode (20) is connected to the first chamber (a) to generate an electric field between the metal electrode plate (30a, 30b) and the grounding electrode (20) thereby to separate the waste liquid in the first chamber (a) into regenerated cleaning liquid, regenerated water and the ink pigment.

In a vessel (2) to which waste liquid (11) which contains ink pigment, water and cleaning liquid used in a printer is supplied, a metal electrode plate (30a, 30b) which allows the waste liquid (11) to flow therethrough is disposed to partition the inside of the vessel (2) into a first region (a) and a second region (b). A high voltage from a high-voltage power supply (7) is applied to the metal electrode plate (30a, 30b) while a grounding electrode (20) is connected to the first chamber (a) to generate an electrostatic field

between the metal electrode plate (30a, 30b) and
the grounding electrode (20) so that the water and
the ink pigment are electrostatically agglomerated
from the waste liquid (11) making use of
electrophoresis of the ink pigment by the
electrostatic field thereby to separate the waste
liquid in the first region (a) into the cleaning
liquid, water and ink pigment.